THE ARIZONA HEALTH CARE COST CONTAINMENT SYSTEM: THIRTEEN YEARS OF MANAGED CARE IN MEDICAID

July 1996

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for
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EXECUTIVE SUMMARY

In Arizona, acute and long term care services are provided to Medicaid beneficiaries through a mandatory statewide managed care system. The Arizona Health Care Cost Containment System (AHCCCS) and The Arizona Long-Term Care System (ALTCS) provide health care services to nearly 450,000 of Arizona's poor. This paper reports on findings from evaluations of the AHCCCS and ALTCS undertaken for Health Care Financing Administration (HCFA) to assess the over 13 years of experience with Medicaid managed care in Arizona. The Arizona experience provides useful insights into the promises and pitfalls of managed care for low-income populations.

The AHCCCS program receives Medicaid funding from HCFA under a Section 1115 research and demonstration waiver. Until 1982, Arizona was the only state electing not to participate in the federal Medicaid program. The original AHCCCS program, established in 1982, provided health insurance through capitated arrangements, but excluded long-term care services. In 1989, ALTCS was incorporated into AHCCCS, extending long-term care coverage to Arizona's low-income elderly and disabled populations.

The AHCCCS program provides a full range of acute, behavioral, home care and institutional services to eligible beneficiaries. It functions as a partnership between the state and plans in the acute care program and between the state and contractors in ALTCS. In July 1995, AHCCCS served approximately 430,000 eligibles through 14 acute care plans and 20,000 eligibles through 8 long-term care contractors. Both the state and the plans and contractors have defined roles and responsibilities. Central to the functioning of the program is sharing of information between the state and the plans or contractors.

Two kinds of analyses were conducted during the evaluations: analysis of program outcomes and analysis of the implementation and operation of the special features of AHCCCS. The evaluations involved site visits, interviews, review of AHCCCS documents, claims and encounter data, and review of comparison data from the New Mexico Medicaid program, other Medicaid programs, and other sources. The results of the program outcomes were generally positive. The overall intensity of health care service use was found to be similar between Arizona and its comparisons, but the Arizona program de-emphasized the use of institutional services and specialty care.

The evaluation of access and quality issues resulted in mixed findings. Overall, persons enrolled in AHCCCS had comparable or better access to health care services and better quality of care for children than comparable groups in New Mexico's Medicaid program. However, some areas of concern were raised by the evaluation,

including lower quality indicators for nursing home care and prenatal care. These findings have been taken seriously by the AHCCCS Administration, which has addressed monitoring problem areas found in their on-going quality assurance activities.

The evaluation found the AHCCCS program to be cost effective. The cost analysis results indicate that AHCCCS resulted in an estimated cost savings of $500 million through FY 1993. Modest cost savings estimated for the early years of the programs' implementation have accelerated over time. The acute program's savings averaged 7 percent per year for FY 1982-1993, and ALTCS' savings averaged 16 percent per year for FY 1989-1993. While the program saves on services overall, its administrative costs are higher than traditional Medicaid programs. This is largely attributable to expanded administrative responsibilities and the development and maintenance of a comprehensive management information system.

The implementation of the AHCCCS program had a rough beginning, but the operation of the program is now smooth. Findings from the evaluations highlight a number of areas where states implementing similar programs should focus attention.

- Well functioning systems to obtain or communicate eligibility determination information and quickly enroll members into capitated entities are critical.

- The qualifications and responsibilities of the capitated entities should be considered closely in the selection process.

- An evolving strategy for setting capitation rates that considers the specific marketplace conditions in each individual rate setting process will be required.

- Administrative structures should be developed that will enable states to determine eligibility and enroll members; procure, pay and regulate capitated entities; monitor quality issues; collect and analyze data; and in addition, support all the activities of a fee-for-service Medicaid program.

- Management information systems that control day-to-day transactions as well as support financial analysis and rate setting, quality assurance, monitoring of utilization, and program planning are vital to smooth operation of the program.

I. Introduction

Managed care has taken a central position in the policy debate about reforming federal financing programs. Advocates advance substantial cost savings estimates for moving beneficiaries into these programs while observing increased access to care. Detractors worry about the costs of administration and profit, and attention to quality of care in a more market-driven system.

With increased pressure on public programs to decrease costs while maintaining a safety net of service use for beneficiaries, many state Medicaid programs are looking to managed care as an important component of an improved and more cost-effective delivery system.

This paper examines the lessons learned from evaluations of the first statewide managed Medicaid program, the Arizona Health Care Cost Containment System (AHCCCS). In existence since October 1982, the program has more than thirteen years of implementation experience to draw on by states considering managed care initiatives. Below the AHCCCS program is described and results of two six-year Health Care Financing Administration (HCFA) evaluations of the program are presented. Following that, key lessons of the evaluations are discussed.

II. The AHCCCS Program

The AHCCCS program began in October 1982 as an alternative to traditional Medicaid, receiving Medicaid federal funding under a Section 1115 Research and Demonstration waiver. Before October 1982, medical services for the indigent were paid for by Arizona's counties. At that time, Arizona was the only state not participating in Medicaid and therefore was able to start the new program without dealing with an existing bureaucracy. The original AHCCCS program covered only acute care services and excluded long-term care. In 1989, The Arizona Long-Term Care System (ALTCS)

was incorporated into AHCCCS, providing long-term care coverage to Arizona's low-income population.

Services provided under AHCCCS include all traditional Medicaid program services including hospital, physician, behavioral, preventive, and ancillary services. ALTCS beneficiaries' services also include nursing facility care and home and community-based services (HCBS). The AHCCCS program has small copayments for patient-initiated services; however, services cannot be withheld for non-payment of a copayment amount.

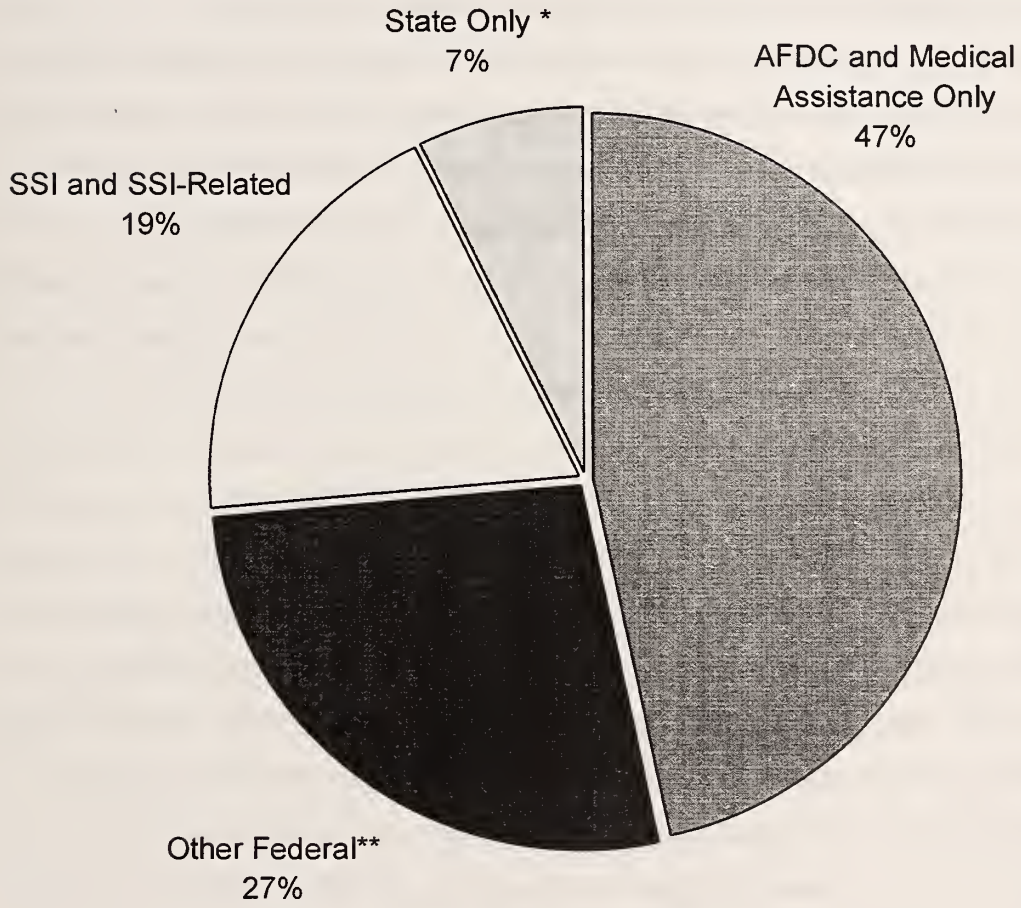
The AHCCCS program provides managed care services to all eligible beneficiaries statewide through acute care plans and long-term care contractors capitated by the state. The state provides the overall direction of the program. State responsibilities include: selecting and making capitation payments to the plans and contractors, determining program eligibility and enrolling members into plans and contractors, monitoring overall quality of care delivered, hearing grievance appeals, and managing plan and contractor activities. The state also maintains an information system to support program activities, provides program financial management, conducts governmental and legislative liaison, and performs research and program planning. In addition, the state provides reinsurance for inpatient services and coverage for catastrophic eligibles. In the past, AHCCCS has also acted as the plan or contractor in counties for which it was unable to find a qualified plan or contractor at an acceptable capitation rate.

Plans and contractors have a broad range of service delivery, internal monitoring, and data sharing activities. Besides providing case-managed covered services, they must manage a provider network, distribute a member handbook, and collect third-party and patient liabilities. They must also maintain systems for quality management, financial management, grievance and appeals, and data management. The data management system must support timely submission of data to AHCCCS.

The distribution of beneficiaries by category of eligibility as of July 1995 is shown in Figure 1. Forty-seven percent were Aid to Families with Dependent Children (AFDC) cash and medical assistance-only beneficiaries. Twenty-seven percent were

Figure 1

DISTRIBUTION OF ACUTE AND LONG-TERM CARE BENEFICIARIES
BY CATEGORY OF ELIGIBILITY AS OF JULY 1995



Total = 446,250 Beneficiaries

*Eligible Assistance Children, Eligible Low-Income Children, Medically Indigent, Medically Needy, and State Emergency Service.

**Children's Medical Program, SOBRA, Federal Emergency Service.

Source: AHCCCS Enrollment/Eligibility Status Report, July 1, 1995

eligible because of other federal eligibility (Children's Medical Program, SOBRA, Federal Emergency Service recipients). Nineteen percent had Social Security Income (SSI) eligibility and the remainder, seven percent were populations covered with state only dollars (Eligible Assistance Children, Eligible Low-Income Children, Medically Indigent, Medically Needy, and State Emergency Service recipients).

AHCCCS covered about 430 thousand beneficiaries in the acute part of the program and 20 thousand beneficiaries in ALTCS in July of 1995. Most acute care beneficiaries were served through one of the 14 health plans selected through a competitive bidding process. The state releases a request for proposal listing participation requirements every three years. Qualifications and bids are submitted by each offeror. Bids are made separately by county for six rate codes. Winning bidders are selected based on their network, capitation bid, program, and organization. All beneficiaries have a choice of the health plans available in their county. All counties have two or more health plans.

The long-term care program capitates contractors to provide acute, home and community-based, and institutional services to beneficiaries financially eligible (up to 300 percent of SSI) and determined by state assessors, using a preadmission screening instrument, to be at risk of institutionalization. Beneficiaries include both the elderly and physically disabled (EPDs) and the mentally retarded/developmentally disabled (MR/DDs). Contractors in July 1995 included five counties, two private contractors, and the Arizona Department of Economic Security. Beneficiaries are assigned to a contractor. Contractors provide case management and make placement decisions. They are capitated at a negotiated rate using a methodology which provides economic incentives to serve beneficiaries in home care rather than in nursing homes.

The ALTCS program as a whole has a HCFA-imposed cap on the percentage of EPD beneficiaries that can be served in home care. Originally set at 10 percent of beneficiaries, it was slowly raised as the program's use of home care was demonstrated to be cost-effective. The rate was 40 percent in fiscal year 1995 (FY 1995).

In state fiscal year 1995 (July 1994 - June 1995), program revenues and expenditures were projected to total $1.9 billion. Program revenues by source are shown in Figure 2. The federal government supplied 60 percent of program revenues, the state 30 percent, and the Arizona counties 10 percent. Expenditures are shown in Figure 3. Two-thirds of the expenditures were for acute care plan capitation or ALTCS medical services. Fee-for-service payments made up 10 percent of program expenditures. Lesser amounts were expended for disproportionate share hospital (DSH) payments (7 percent), mental health services (6 percent), administration (5 percent), and other services (6 percent). Other services include reinsurance, deferred liability, children's rehabilitation, Medicare premiums, and qualified Medicare beneficiary payments.

III. Results of the HCFA Evaluations of AHCCCS

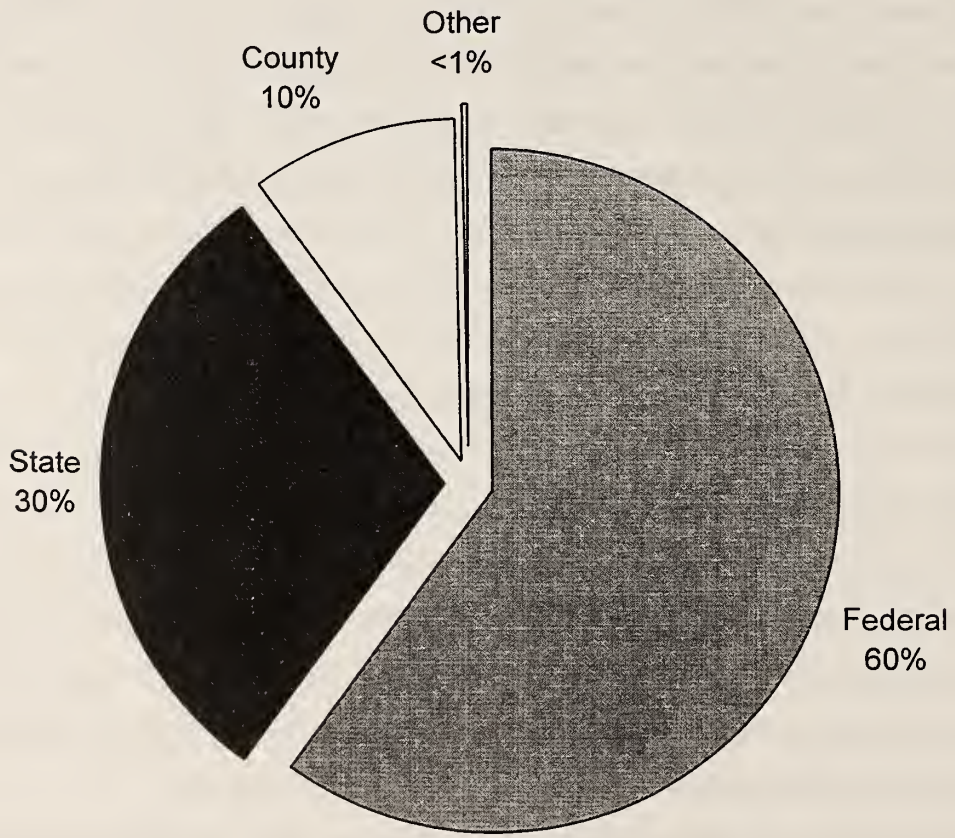
The Health Care Financing Administration (HCFA) has funded two six-year evaluations of the AHCCCS program because the AHCCCS program operates under a Section 1115 Research and Demonstration Waiver. The first evaluation focused on the acute care program and the second on the long-term care program. Some acute care program issues were followed in the second evaluation including its cost and utilization experience, and the program's management information system.

Two kinds of analyses were conducted as part of both evaluations: analysis of the implementation and operation of special features of the AHCCCS program, and analysis of program outcomes.

The implementation and operation analysis involved site visits, interviews, review of AHCCCS documents, and review of comparison data. The analysis describes the functioning of the program, chronicles its evolution, and points out lessons for other states considering implementation of similar programs. Five areas were studied: beneficiary eligibility determination and enrollment in capitated plans; the structure and organization of the participating plans and contractors; the method of determining the

Figure 2

DISTRIBUTION OF AHCCCS PROJECTED REVENUE FOR
STATE FISCAL YEAR 1995 BY SOURCE AS OF JUNE 1995

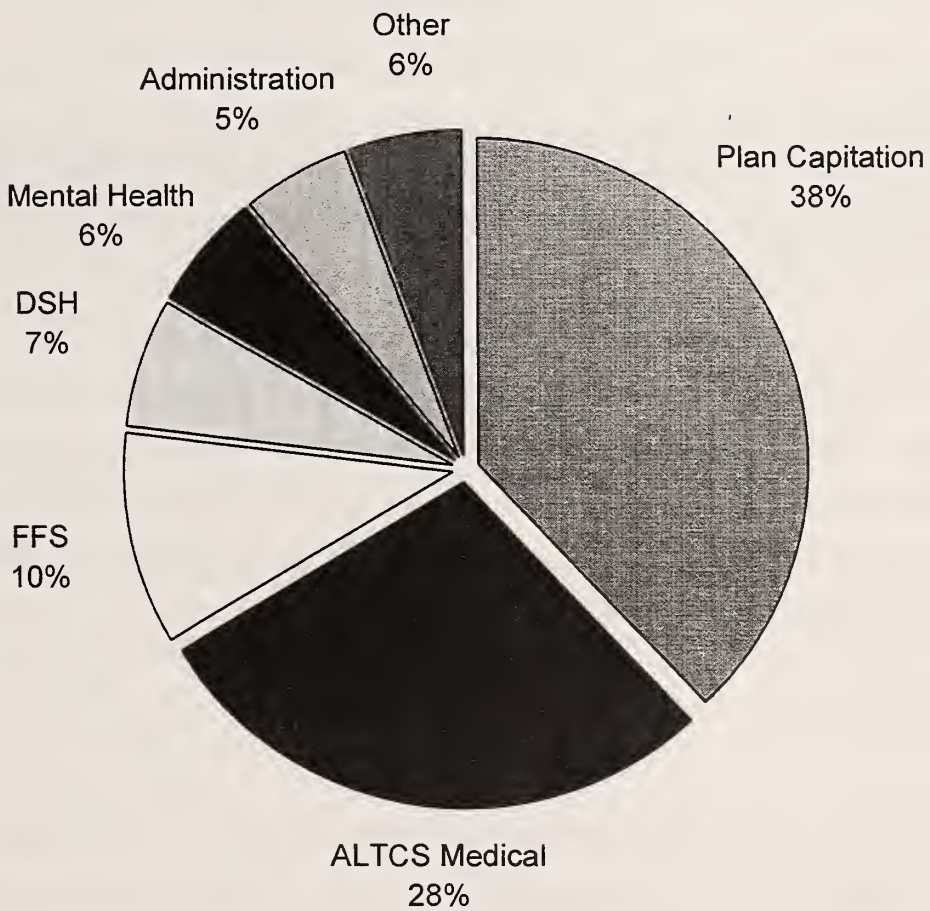


Total Projected Revenue = $1.9 Billion

Source: AHCCCS Administration, June 30, 1995 Appropriation Status Report, adjusted to include Title XIX revenues that are excluded from AHCCCS appropriations (DES/DD, DHS CRS, and DHS Mental Health)

Figure 3

DISTRIBUTION OF AHCCCS PROJECTED EXPENDITURES
FOR STATE FISCAL YEAR 1995 AS OF JUNE 1995



Total Projected Expenditures = $1.9 Billion

Source: AHCCCS Administration, June 30, 1995 Appropriation Status Report, adjusted to include Title XIX revenues that are excluded from AHCCCS appropriations (DES/DD, DHS CRS, and DHS Mental Health)

capitation rates to be paid; program administrative costs; and the program's management information system.

The outcome analysis focused on comparisons of AHCCCS with traditional Medicaid. It examined the utilization of medical services, quality and access to care, and the cost of AHCCCS. The utilization analysis compared encounter and claims data in Arizona with claims data in the New Mexico Medicaid Program. For long-term care beneficiaries, Medicare claims were also included.

Quality and access to care studies included a household survey of AFDC and SSI acute care beneficiaries, a medical record review of AFDC mothers and babies, and a nursing home record review of EPD nursing home residents. The comparison group for all of these analyses were beneficiaries in the New Mexico Medicaid Program.

The cost analyses were conducted separately for the acute care program and for ALTCS. The actual costs incurred by the AHCCCS program were compared against an estimate of what a traditional Medicaid program would have cost in Arizona. The estimates were made using HCFA Form 2082 and Form 64 data, and Medicaid Management Information System (MMIS) data from states with complete data and similar Medicaid requirements. In the acute care estimate, 13 states were used for the AFDC estimates and 20 for the SSI estimates. In the ALTCS estimate, 6 states were used in FY 89, 9 in FY 1990, and 12 in FY 1991-1993.

A. Outcome Findings

Over the course of the evaluations program outcomes related to utilization of medical services, quality and access to care, and cost of the program were examined. Findings are summarized inTables 1 through 3.

1. Utilization of Services

An analysis of medical care utilization provides important information about the number and types of services being provided within a health care program. Several utilization analyses involving different time periods were conducted during the course of

Table 1
MAJOR OUTCOME ANALYSIS FINDINGS
UTILIZATION

ACUTE PROGRAM	
Data	FY 1991 and FY 1992 Medicaid claims and encounters for 5% sample in AZ and NM
Findings	Less hospital days, procedures, imaging, and outpatient service use in AZ than in NM Evaluation and management service use and laboratory use about the same or larger in AZ than in NM No evidence of underutilization of services was found Comparison data from other Medicaid managed care programs were available only for three states
ALTCS	
Data	January 1991 - September 1992 Medicaid claims and encounters linked with Medicare claims in AZ and NM
Findings	For elderly and physically disabled: • Less hospital days, procedures, and laboratory tests in AZ than in NM • More outpatient services, evaluation and management services, imaging, HCB services and prescriptions in AZ than in NM • Medicare coverage has a large impact on use of services For mentally retarded/developmentally disabled: • Data available only for institutional services because Medicaid encounter data incomplete • Institutional data indicate similar rates of inpatient care and prescription use in AZ and NM, but substantially less nursing home care. The rate of use of nursing home care in NM is 16 times the rate in AZ.

Table 2
MAJOR OUTCOME ANALYSIS FINDINGS
ACCESS AND QUALITY

ACCESS AND SATISFACTION	
Data	1985 household survey of 897 AZ and 553 NM AFDC and SSI beneficiaries
Findings	Better access to routine care in AZ, although more reported problems with access to ER care AZ beneficiaries indicated more often that they have a place to go for care on weekends and nights Use of medical care for particular symptoms indicated that both AZ and NM beneficiaries were getting desirable levels of care given their reported symptoms Primary prevention and preventive care use was similar On seven elements of care, the lowest average score received in Arizona was "somewhat satisfied"
QUALITY OF ACUTE CARE	
Data	Review of medical records for care received November 1985 - April 1987 of 738 AZ and 730 NM pregnant women enrolled for their entire pregnancy and children enrolled since birth
Findings	Care for children (well-baby, otitis media, immunizations) was in greater conformity with American Academy of Pediatrics guidelines in AZ than in NM Maternity care, pregnancy care and pregnancy outcomes were similar, but AZ had a smaller number of prenatal visits and a later initiation of care in AZ than in NM
QUALITY OF NURSING HOME CARE	
Data	Review of nursing home records for care received January 1991 - December 1992 by elderly and physically disabled ALTCS and NM Medicaid beneficiaries in nursing homes
Findings	Quality was poorer on some measures for AZ beneficiaries -- incidence of pressure sores, incidence of fever, having a catheter inserted, having an influenza vaccination Quality was similar on other measures -- incidence of falls and fractures, use of psychotropic drugs Problems identified were taken seriously by the AHCCCS Administration which initiated steps to include assessment of problem areas found in their ongoing quality assurance activities

Table 3
MAJOR OUTCOME ANALYSIS FINDINGS
COST

ACUTE PROGRAM	
Data	FY 1983 - FY 1993 Actual costs compared against estimates for a traditional program in AZ. Estimates based on HCFA Reports (2082 and 64) from states with similar Medicaid requirements and complete data. Separate estimates calculated for AFDC, SSI Aged, SSI Blind and SSI Disabled categories of eligibility. Thirteen states used for AFDC estimates and 20 for SSI estimates.
Findings	Cost savings averaged 7% per year Cost savings would have been 11% per year if only medical service costs (not administrative costs) were considered Costs were rising more slowly in AZ than traditional program estimates -- 9.1% per year as compared to 10.3% per year $197 million in savings from FY 1983 - FY 1993
ALTCS	
Data	FY 1989 - FY 1993 Actual costs compared against estimates for a traditional program in AZ. Estimates based on Medicaid Management Information Systems data from states with similar Medicaid requirements and complete data. Six states used in estimation in FY 89, 9 in FY 90, and 12 in FY 91-93. Estimates done separately for EPD and MR/DD beneficiaries and for the aged and non-aged.
Findings	Cost savings averaged 16% per year Cost savings were 18% per year if only medical services costs (not administrative costs) are considered Costs were rising more slowly in AZ than traditional program estimates - 4.0% per year as compared to 9.6% per year $290 million in savings from FY 1989 - FY 1993

the evaluations. The most recent time period examined, FY 1991 and 1992, reviewed the utilization experience of acute care beneficiaries and beneficiaries in chronic long-term care. Data for AHCCCS beneficiaries were claims and encounters submitted by the prepaid health plans and contractors. Comparison data were detailed Medicaid claims from the New Mexico Medicaid program and published data from other sources. For the analysis of long-term care beneficiaries, claims data from the Medicare program were also examined.

a. Acute Care Beneficiaries

To compare differences in health care utilization rates in FY 1991 and 1992, a five-percent random sample of all AHCCCS acute care and New Mexico Medicaid beneficiaries not using chronic long-term care services was selected. Medicare beneficiaries were excluded. The number of hospital days, procedures, outpatient services, and imaging services were smaller in Arizona than in New Mexico. Utilization of evaluation and management services and test use in Arizona was about the same or larger than in New Mexico. These relationships held true for both AFDC beneficiaries and SSI beneficiaries without Medicare.

Comparison rates from other Medicaid managed care programs, Medicaid fee-for-service programs, managed care groups, and general population surveys were also sought. Disappointingly, only three Medicaid managed care programs were found with data that could be used in comparison with AHCCCS. The lack of data from other Medicaid managed care programs should be an area of concern not only because it represents an unfulfilled state requirement, but also because data of this type are of critical importance in managing these programs.

In general, review of the data from other sources was consistent with that found in the Arizona and New Mexico comparison. Overall intensity of resources use was similar for comparable types of beneficiaries in the two states, but use patterns showed those in Arizona were less likely to use institutional services and specialty care.

b. Long-Term Care Beneficiaries

Data were compared for service dates from January 1, 1991, through September 30, 1992, for all ALTCS beneficiaries and all chronic long-term care beneficiaries in New Mexico. Because of data quality problems, placement data and non-institutional utilization data for MR/DD beneficiaries in Arizona were not available.

Review of data for EPD beneficiaries indicated that Arizona beneficiaries utilize fewer inpatient days, procedures, and outpatient laboratory tests, but more outpatient services, evaluation and management services, imaging, HCB services, other services, and prescriptions than New Mexico beneficiaries. Differences found in the MR/DD Medicaid data for institutional services reflected the different philosophies of the two states with regard to institutionalization of this population. The rate of nursing home days per MR/DD person year in New Mexico was more than 16 times the rate in Arizona.

Multivariate analyses supported the findings and indicated the effect of Medicare coverage on the use of medical care services of all types. Having Medicare coverage significantly increased service use. Older age was consistently associated with less use of all services, although the effect of age was not nearly as pronounced as that of Medicare coverage.

Utilization rates reported for both the long-term care and acute care programs indicated that there appears to be no evidence for underutilization of services in AHCCCS. On the contrary, given that a utilization analysis based on the submission of encounter data may result in under reporting of service use, the results indicated robust utilization of services.

2. Quality and Access to Care

Over the course of the evaluations, three special studies were done to measure access to and quality of care in the AHCCCS program. Access and satisfaction were examined using a beneficiary survey and quality was assessed using two separate reviews of medical records.

a. Access and Satisfaction

A household survey of 897 AHCCCS AFDC and SSI beneficiaries and 553 New Mexico Medicaid AFDC and SSI beneficiaries who had at least 12 months of enrollment as of March 1985 was conducted in 1985. Overall, the findings suggest persons enrolled in AHCCCS had comparable or better access to health care services than those in New Mexico. The only exception was emergency care, where the AHCCCS sample reported more problems with access than the New Mexico sample. These reported difficulties with respect to emergency care may have been true problems or they may have been due to a faulty perception of the need for emergency care in a system which appropriately keeps people out of these facilities.

Results of the survey indicated access to routine care was much better under AHCCCS than the New Mexico Medicaid program. There were no significant differences with respect to urgent care access, and in knowing a telephone number to call for care at night and on weekends, but there was greater knowledge in Arizona of a place to go for care at night and on weekends. There were also no significant differences with respect to general utilization measures (percentage with ambulatory visit, number and length of hospitalization, etc.); primary prevention (discussion of dangers of smoking, storing cleaning products away from children, use of safety car seats for children, and family planning); and preventive care use (physical exams, eye exams, blood pressure checks, pap smears, and breast examinations).

Satisfaction scores for seven aspects of medical care (costs paid out of pocket, doctor's courtesy and concern, information given, availability of care on nights and weekends, ease and convenience of getting to the doctor, waiting time in doctors' offices, and overall medical care) for AHCCCS were high. Respondents in the comparison site had slightly higher scores on three of the seven measures (doctors' courtesy and consideration, overall medical care and availability of medical care on nights and weekends). AHCCCS beneficiaries were also significantly more aware of how to make a complaint than those in the comparison state.

Even in the program's third year, there was evidence that beneficiaries were functioning within the managed care system: three-fifths of AHCCCS respondents

reported that they had chosen their AHCCCS plan; two-thirds said that there was one particular doctor they usually saw at their plan; and for those with a particular doctor, 95 percent could name the doctor.

b. Quality of Acute Care

To examine differences in the quality of care, medical records were reviewed for the care received by AHCCCS beneficiaries in Pima County, Arizona, and Medicaid beneficiaries in Bernalillo County, New Mexico, for the period from November 1985 through April 1987. The AHCCCS and New Mexico Medicaid beneficiaries included children with continuous eligibility from birth and women with continuous eligibility for the nine months prior to their pregnancy outcome date.

Overall, the analysis indicated better well-child care in AHCCCS compared with a traditional Medicaid program. Care under AHCCCS resulted in earlier, more frequent, and more complete well-child care. The care of children in New Mexico was fragmented, with a large percentage of well-child care being delivered in public health clinics where the care focused more on immunizations than on well-child exams.

The identification of a primary care provider in Arizona may make it easier for children to receive appropriate well-child care. In addition, it is possible that the routine EPSDT monitoring and the plans' use of standardized EPSDT forms, which have occurred as a result of AHCCCS quality assurance requirements, raised the level of attention to, and standardization of, the well-child care delivered in the state.

Review of prenatal care indicated areas for improvement in AHCCCS. Although there was little difference between the states in the content of periodic prenatal visits and in birth outcomes (birthweight, gestational age, Apgar score), there was a later initiation of care and smaller number of prenatal visits in Arizona. Findings of variation by time period and by type of plan indicated areas for further analysis and improvement.

c. Quality of Nursing Home Care

The incidence of specific indicators associated with quality of care were examined for EPD nursing home populations in ALTCS and in the New Mexico Medicaid program in 1991 and 1992, the second and third years of the ALTCS program. These indicators were decubitus ulcers, falls, fractures, fevers, indwelling urinary catheter use, offering of influenza vaccine, and psychotropic drugs prescribed.

The findings of the evaluation indicate that the quality of nursing home care for the EPD population was generally lower in ALTCS than in the New Mexico Medicaid program. The results indicated that nursing home residents in the ALTCS program were more likely to experience a decubitus ulcer, a fever, and a catheter insertion than nursing home residents served by the New Mexico Medicaid program. ALTCS nursing home residents were also less likely to be offered an influenza vaccine than Medicaid nursing home residents in New Mexico. There were no significant differences between nursing home residents in ALTCS and those in New Mexico with respect to the incidence of patient falls or fractures or in the use of psychotropic drugs.

The lower quality of care found for certain indicators in ALTCS must be balanced against: limited evidence that suggests the quality of care may be higher than the national average for the indicator conditions in both states; the payment of per diem rates to nursing homes for reimbursement both in Arizona and New Mexico; lack of data on quality of care pre-ALTCS; and the short time frame between the start of the ALTCS and the beginning of the study. In addition, the problems identified were taken seriously by the AHCCCS Administration, which has initiated steps to include assessments of problem areas found in their ongoing quality assurance activities.

3. Cost of the Program

Cost analyses were done separately for the acute care program and ALTCS. The methodology used was similar for both and compared the actual AHCCCS costs against an estimate of the costs of a traditional Medicaid program in Arizona. The estimates for the traditional program were based on averages for comparison states

selected because of the similarity of their Medicaid requirements with Arizona's and the reliability and completeness of their data.

a. AHCCCS Acute Care Program

Actual AHCCCS costs were for capitation payments to the plans, fee-for-service claims, reinsurance, deferred liability claims, Medicare Part B premiums, disproportionate share hospital payments, third-party recoveries, and administrative costs. The estimated cost of a traditional Medicaid program was the adjusted average per capita cost for a set of comparison states. The analysis was done separately for AFDC, SSI aged, SSI disabled, and SSI blind beneficiaries. Comparison states were selected for each eligibility group: 13 comparison states were used for the AFDC comparison and 20 for the SSI aged, SSI disabled, and SSI blind comparisons.

Acute care program costs have been evaluated for the program's first 11 years, FY 1983 through FY 1993. During that period the AHCCCS program produced cost savings of $197 million, an average savings per year of approximately 11 percent of medical service costs and 7 percent of total costs (medical service cost plus administrative cost), compared to a traditional Medicaid program.

Cost savings have increased over time. The average savings as a percent of traditional program estimates were -4.5 percent in the first year (FY 1983), an average of 3.6 percent per year for the next five years (FY 1984 through FY 1988), and an average of 8.3 percent per year for the last five years (FY 1989 through FY 1993). The annual increases in cost for the AHCCCS acute care program relative to a traditional program were also smaller. The average annual increase for AHCCCS costs was 9.1 percent per year as compared to an estimated 10.3 percent per year for a traditional program in Arizona. Actual dollar savings estimates for FY 1991, FY 1992, and FY 1993 were between $40 and $50 million per year.

b. ALTCS Program

The cost of providing long-term care services to a Medicaid population depends on the number of people who use long-term care services and the cost per month of

those users. Estimates of the number of users, cost per month, and total cost for ALTCS were compared with corresponding experience of traditional Medicaid programs in the comparison states for the first five years of the program, FY 89 through FY 1993. Six states were used in the comparison in FY 89, nine states in FY 1990, and 12 states in FY 1991 through FY 1993.

ALTCS costs, including medical and administrative costs, were estimated to be an average of 16 percent per year less than the cost of a traditional Medicaid program in Arizona for the period FY 1989 through FY 1993. If only medical services were considered, the program savings would be 18 percent per year. Total cost savings realized were almost $290 million. Estimated cost savings per year have increased over time. They were 0.2 percent in FY 1989, 8 percent in FY 1990, 15 percent in FY 1991, 21 percent in FY 1992, and 21 percent in FY 1993, compared to estimates of the cost of a traditional Medicaid program in Arizona. The annual increases in cost for ALTCS relative to a traditional program were also smaller. The average annual cost increase for ALTCS costs was 4.0 percent per year as compared to an estimated 9.6 percent per year for a traditional program in Arizona. Cost savings in the last two years, FY 1992 and FY 1993, were estimated to be over $100 million per year.

Analyses of the two kinds of ALTCS beneficiaries, EPDs and MR/DDs, show different patterns of cost savings. The EPD population experienced more cost per user than the MR/DDs in the first three years and slightly smaller costs in FY 1991 and FY 1992. The number of months of use was consistently smaller than estimates for the traditional program. The MR/DD costs per user were consistently less than the estimates of a traditional program, while the MR/DD number of months of use was greater.

Both the AHCCCS acute care program and ALTCS seem to be successful in producing cost savings. Modest cost savings estimated for the early years of program implementation have accelerated over time. Through FY 1993, cost savings for the first 11 years of the acute care program and the first five years of the ALTCS program were almost $490 million. These cost savings are likely to continue as the latest bidding

cycle has demonstrated increased market competition which has driven down capitation rates.

4. Summary of Outcome Findings

These outcome analysis results, while generally favorable toward managed care, have also demonstrated the need for close monitoring of quality of care and access issues. Special studies performed over the course of the two evaluations highlighted areas where AHCCCS procedures and methods could be improved and demonstrate the importance of having an analysis capacity within the administration of a managed care program to monitor these activities.

B. Implementation and Operation Findings

How the operational components of the program are designed is of paramount importance. Five major kinds of implementation issues were examined over the course of the two evaluations.

- Eligibility and enrollment
- Structure and organization of the plans and contractors
- Determining capitation rates
- Program administration
- Management information systems

1. Eligibility and Enrollment

Eligibility and enrollment are critical areas of operation that must be carefully coordinated and closely linked. A well-oiled enrollment process is especially important because it marks the beginning of the contracting entities' responsibility for the delivery of care and signals the start of capitation payments. Before successful enrollment, the

state is liable for expenses of beneficiaries deemed eligible. AHCCCS results indicate four areas for consideration.

- ***In the first two years of the AHCCCS program, problems in eligibility and enrollment were a major source of difficulty.*** In AHCCCS, depending on the eligibility group, eligibility determination is handled by the Department of Economic Security, the Social Security Administration, the Arizona counties, or the program itself. AHCCCS suffered from considerable difficulty in its first few years in establishing adequate communication links between eligibility determination, enrollment activities, and the prepaid plans. Inadequate administrative and management information systems created these problems, which in turn resulted in a substantial unplanned fee-for-service liability.

- ***Where beneficiaries select from multiple plans, consideration needs to be given to the specific marketing activities permitted.*** In instances where there is a choice of plans by beneficiaries, states need to clearly define marketing requirements and monitor the plan's actual marketing activities. The speed with which the AHCCCS program was implemented limited initial plan marketing activities. Although there were alleged plan abuses in later years, there were no major marketing violations. Over time, plans reduced their marketing activities significantly. Plans focused more on publicizing the names of physicians who participate in their plan rather than on general media promotional activities. Consideration should be given to the review and approval of all marketing materials, restrictions on media advertising, and door-to-door solicitation to assure that plans are functioning in a truthful, appropriate, and fair manner.

- ***One of the most important components of ALTCS is that the state performs the functional/medical assessment for eligibility and therefore controls who enters the system.*** In ALTCS, the long-term care program, beneficiaries must meet both financial and medical/functional eligibility criteria. In Arizona, state employed assessors perform the medical/functional screen, thus controlling entry to the program. Eligible beneficiaries must be deemed to be "at risk of institutionalization" using a standardized preadmission screening instrument.

- ***Placement decisions are made by the long-term care program contractors who have financial incentives to place people at the lowest level of care.*** Once eligibility is indicated, beneficiaries are enrolled with the ALTCS EPD contractor in their county, or the MR/DD statewide contractor, the Department of Economic Security. The contractor determines the client placement in an environment where the capitation rate setting methodology provides financial incentives to deliver care at the lowest appropriate level. The rate is developed

with an assumed mix of home and nursing home care. If the contractor serves more people in home care than the assumed mix, the contractor will keep some or all of the excess income.

2. Structure and Organization of the Plans and Contractors

The role of the acute care plan and the long-term care program contractors is central to the AHCCCS program. They are responsible for managing the care of enrolled beneficiaries within the negotiated capitation rate. AHCCCS' experience with plans and contractors suggest the following considerations.

- ***Responsibilities for the contracting entities in AHCCCS include a broad range of service delivery, internal monitoring, and data sharing activities.*** Responsibilities of the plans and contractors include: providing case managed covered services; managing an adequate provider network; distributing member handbooks; maintaining a quality management system, a financial management system, and a grievance and appeals process; determining and collecting third-party liabilities, copayments, and patient share of cost; and having a data management system that can support the timely submission of required data.

- ***Fourteen acute care plans, selected through a competitive bidding process, provided services in the acute care program. They vary by ownership, profit status, organizational structure, and provider payment methodologies.*** In July 1995, fourteen plans participated in the AHCCCS program. All beneficiaries had a choice of more than one health plan. In Maricopa County there were nine plans to choose from, and in Pima County there were five plans from which to choose. Three plans were providers in five or more counties. Two-thirds of all the beneficiaries were enrolled in five plans. Plans varied widely along organizational dimensions having a wide variety of ownership, profit status, organizational structures, and provider payment methods.

- ***Eight long-term care contractors provided services in ALTCS – five counties, two private entities, and one state agency.*** In July 1995, the ALTCS program contractors included seven contractors providing services for EPD beneficiaries and one contractor, the Department of Economic Security, which is mandated by state legislation to provide services to MR/DD beneficiaries statewide. EPDs are assigned to the contractor in their county. Maricopa and Pima counties, Arizona's two urban counties, are required by state legislation to be the contractors in their county. Three county governments have exercised the right of first refusal, given to counties until July 1995, to become

the contractors in their counties. Two private contractors provided services in ten rural counties. They were selected through a competitive bidding process. One private contractor served two counties and one served eight counties in July 1995.

- ***Responsibilities of the contracting entities need to be clearly defined.*** The responsibilities of the state and their management entities – the plans and contractors – need to be carefully considered in the design of the program. The entities must have the authority and clear responsibility to perform program functions but at the same time have accountability to provide data to assure its effectiveness and quality. Rules for those who can participate as a capitated entity and the evaluation criteria for selecting capitated entities must be carefully considered and detailed written specifications made available.

3. Determining Capitation Rates

Of substantial importance to implementing a managed care program is consideration of exactly how the capitation payments will be developed. They must be high enough to attract contractors and assure quality but low enough so that contractors do not receive excessive profits. AHCCCS has used various strategies over time for particular groups of eligibles, and they should be considered in designing an appropriate model in other states. The AHCCCS experience demonstrates four lessons.

- ***By FY 1995, the acute care program bidding process had become very competitive with less than half the bids awarded and prices driven below previous rates.*** In FY 1995, the AHCCCS acute care plan bidding cycle was very competitive, resulting in only 39 awards out of 95 bids. Several new community players wanted to enter the program, putting substantial downward pressure on winning bid rates. Overall capitation rates actually.

- ***Acute care bids have been evaluated according to criteria which highly value the network. Cost considerations made up only 30 percent of the weight in the selection process.*** The acute care bids have been evaluated on four criteria given different weights: network, capitation, program, and organization. Network received a .35 weight, capitation a .30 weight, program a .20 weight, and organization a .15 weight. Bids are presented separately by county for six rate categories. AHCCCS develops actuarial rate ranges for each rate category and uses these data internally to help them secure affordable Best and Final Offers. Reinsurance for inpatient services is provided by the state. It

includes a per person deductible which varies by the size of the plan and 25 percent plan coinsurance. Special classes of beneficiaries called catastrophic eligibles have no deductible and 5 percent plan coinsurance.

- ***The long-term care program has used a process of setting capitation rates that over time has shifted more risk to the contractors. It has also provided financial incentives to serve people at the lowest appropriate level of care possible. Because of the large number of eligibles who have captive contractors (i.e., they are required to be program contractors under state legislation), AHCCCS has tried to be creative in attempting to secure the lowest possible rates through a component bid process.*** In order to try to maintain control over long-term care component costs, the ALTCS capitation rates in FY 1994 were set by several components. Eleven components were defined: institutional cost, Medicare and other third-party payments, share of cost, capitation lag, HCB cost, mix of HCB and nursing home placements, acute care, mental health, case management, administration, and profit. Actuarial ranges were established for each component. Components were bid individually by the contractors. If the bid exceeded the actuarial range, the final award was the midpoint of the range. The components were summed to get the final capitation rate.

- ***Capitation rate development has evolved over time. Specific market place considerations need to be taken into account in developing an appropriate strategy for each individual rate setting process.*** The AHCCCS capitation rate setting process has changed over time as the marketplace in the state has evolved. States considering implementing an AHCCCS-type program must be aware of this dynamic. In the beginning of the program, there may be need for active involvement of the state in helping potential bidders to get organized and focused on the changing environment. This kind of help may be necessary for public providers (e.g., county organizations, community health centers, public health clinics, inner-city urban providers) who have been the usual community sources of indigent care. As the program evolves, it may go through stages where interest in participation is weak and stages where interest in participation is strong. States must take an active role in attempting to make their market place more competitive by encouraging potential entrants and sharing information. They also should assess their market potential before each bidding cycle, and carefully develop a strategy in tune with their market assessment. Stimulating a competitive market is an ongoing process which requires a substantial state commitment to collection and use of data.

4. Program Administration

In some minds, administrative costs in and of themselves are wasteful. However, administrative activities can support effective program management and ultimately save program dollars. AHCCCS can be looked to for findings in four broad areas.

- ***Early efforts to privatize the program administration were unsuccessful.*** The initial AHCCCS model conceptualized by the Arizona state legislature subcontracted program administration to a private contractor. The state took back program administration functions in a crisis mode 18 months into the program. Thus, efforts in Arizona to privatize a full range of administrative, policy and regulatory functions to a contracted private administrator were unsuccessful.

- ***State administrative activities are different in managed care environment than in traditional fee-for-service Medicaid.*** Administrative functions of a managed care program are different than those associated with a traditional Medicaid program. These activities include procuring providers, monitoring provider networks, enrolling members in plans, paying capitation payments to plans, monitoring plan quality and financial viability, and collecting data on utilization of services.

- ***Infrastructure development necessary in managed care requires expensive personnel and computer resources.*** New systems need to be designed and implemented which require commitment of expensive personnel and computer resources. Three areas of expertise needed in the managed care environment but may not have been found in traditional Medicaid programs are:

    1. A Chief Information Officer: a senior manager who knows how to collect and analyze data, and use it for policy development.

    2. A Chief Financial Officer: a senior manager who has experience in the financial management of HMOs and other capitated entities, and can lead the monitoring of plan operations.

    3. A Chief Medical Officer: a senior manager who has experience leading activities in assuring and monitoring the quality of care in the delivery of Medicaid services.

- ***AHCCCS saves money overall even though its administrative costs are higher; states should look beyond the initial investment and higher operating expenses toward future overall cost savings and more effective program management.*** Administrative costs experienced by the AHCCCS program have been higher than those of traditional Medicaid programs. In the program as a whole in FY 1993, administrative costs as percentage of medical services costs were almost double the percentage for traditional programs, 6.9 percent versus 3.5 percent. These are state costs only and do not include the administrative costs of the plans and program contractors. Analysis of overall AHCCCS program costs – medical services costs plus administrative costs – as compared with the estimates of a traditional Medicaid program in Arizona, indicated average cost savings of 7 percent per year in the AHCCCS acute care program and 16 percent per year in the long-term care program. Thus, it appears that higher administrative costs resulted in lower medical services costs, which in turn resulted in overall program cost savings.

5. Management Information Systems

Despite the promise of managed care as a vehicle to rationalize the health delivery system in publicly-funded programs, sufficient consideration is often not given to the management information development necessary for the operation of prepaid managed care. This kind of infrastructure development involves the establishment of information systems to procure providers, to monitor service networks and primary care providers, to enroll members, to make capitation payments, to regulate plan activities, and to collect and analyze utilization data. Considerations for programs based on the AHCCCS experience can be found in the following general areas.

- ***AHCCCS' initial attempts to use an existing management information system (MIS) to control day-to-day transaction activity and to provide operational and management information in a prepaid system were a resounding failure.*** The first three years of the AHCCCS program were marked by design and operational shortcomings in their management information system as well as problems in collecting complete and accurate utilization data from the plans. Over time, various components of the data collection process improved substantially (processing input into the system, providing technical assistance), and others improved with respect to their mechanical aspects (error detection and correction, quality control activities, plan motivational activities). However,

five years into the program, evaluations still indicated shortcomings with respect to system design and its overall management. Encounter data were unusable for the first three years of the program. By the fourth year, overall rates of approved encounters seemed to be broadly within the expected ranges.

- ***AHCCCS implemented a Prepaid Medicaid Management Information System (PMMIS) in 1991 after a five-year development effort. Although the development effort was more costly than originally envisioned and operating costs two years after implementation were higher than the prior system and comparative Medicaid programs, AHCCCS managers who use the system think it is indispensable to their jobs.*** Recognizing that AHCCCS's MIS system, which was designed to support a fee-for-service Medicaid program, was not capable of supporting prepaid activities, AHCCCS began a development effort for a new system in 1986. The original development budget was $18 million. Operational costs were projected to be at the same level as the previous MIS. Total development costs were $29.5 million. Post-PMMIS operational costs were $2.81 per member month as compared to $0.72 per member month for the prior system. Comparison with other Medicaid programs of the same size with an existing MMIS indicated AHCCCS PMMIS costs per member month were about 50 percent higher than the group as a whole. While review of specific projected tangible benefits projected did not show real savings two years post implementation, the AHCCCS managers that use the system are very enthusiastic about it and find it indispensable to their jobs.

- ***Activities for effective information use must focus also on the quality of the input data. Collection of usable data – eligibility, enrollment, network analysis, capitated entity cost, utilization of services and, for long-term care beneficiaries, medical/functional assessment – requires considerable state attention, active participation from the capitated entities, and commitment by the state to use the data on a daily basis in managing the program.*** AHCCCS management information system personnel during the first five years of the program often centered their thinking on the hardware and software aspects of having an effective system to the exclusion of expending resources to assure the quality of the input data. The management information effort must focus considerable energy on assuring the accuracy of the input data and have systems in place which can critically evaluate its reasonableness and, implement the steps necessary to ensure its usability. These activities require close coordination with those from whom data are being received, quick quality review of the data, and use of the data in day-to-day program operations.

- ***With regard to the collection and reporting of utilization data, both the AHCCCS program and the plans and contractors have demonstrated that credible utilization data can be captured and play an important role in managing the program.*** AHCCCS and the health plans have usable individual-

service-based data on utilization which are being used in program management. Areas where data are being used include: financial analysis and rate setting, quality assurance, monitoring of utilization, and program planning. Participation in public programs by private entities brings with it public responsibilities. Supplying information on plan operation, including data on use of services, is one of those responsibilities. Plans not able to provide these data should be excluded from participation in the program because without such data they will not be a cost-effective partner for the state.

IV. Key Lessons

The experience of AHCCCS demonstrates that capitated Medicaid can be successful in providing high-quality, accessible care at costs lower than traditional Medicaid to beneficiaries of all eligibility groups in both urban and rural areas. The experience also suggests that implementation can be problematic and that early planning and investment are critical components of an effective implementation strategy.

Three specific areas that should be considered are:

- the people selected to conduct the implementation;
- the structures which need to be in place to operate the program; and
- the responsibilities of the state.

People

Selection of appropriate people to staff the managed care program is of paramount importance. Individuals who operate the current Medicaid program within the state may not have the skills necessary to implement a managed Medicaid program. Skills which are not routinely found in Medicaid programs, but which are critical, include data collection and analysis, financial management, and quality assurance. Separate individual leaders are necessary for each of these activities (i.e.,

a Chief Information Officer, a Chief Financial Officer and a Chief Medical Officer). Appropriate staff resources also need to be assigned. The leader must be senior within the organization and have sufficient stature to conduct discussions and negotiations with other state agencies, legislators, governors' staff, and health plan directors. In addition, these leaders must have the vision to formulate a specific plan of operation and select and manage appropriate staff.

Structures

Consider carefully design options for the operation components of the program. These include defining: responsibilities of the state and the capitated entities; eligibility determination process; enrollment in capitated entities; rules for who can participate as a capitated entity; evaluation criteria for selecting capitated entities; method of setting capitation payments; and meeting the information needs of the program. The last of these is of substantial importance, as the information needs of a managed care system, which requires specialized personnel and technical resources, cannot be ignored in a rush toward program implementation.

Responsibilities

The state will have important responsibilities that will need to be considered in the following areas:

- Quality assurance
- Utilization and access monitoring
- Financial management
- Planning for the future
- Coordination with other states

Quality assurance activities require early and concerted energy. Important areas include: activities to detect underutilization of services, review of treatment patterns by diagnosis, monitoring of selected procedures, detection of fraud and abuse, and profiling of plans and physicians for quality and appropriateness.

Analysis of the utilization of medical services is a critical component in understanding how a medical care program is performing. In a capitated medical care program, it is of special importance to assure that beneficiaries are receiving appropriate treatment. This includes both analyzing the specifics of what services are provided and monitoring the adequacy of ambulatory access.

Contracting entities participating must be monitored for financial solvency. To the extent that plan failures occur, the stability of the program is threatened. Monitoring the plans can help identify problems before they become critical. When very serious problems occur, monitoring can provide early warning to help a state make arrangements for a plan's orderly phase out. The state's ability to secure competitive rates also depends on the availability of data that can accurately track costs.

Future planning requires systems in place that can estimate costs of program modifications and future program costs, identify areas which promote long-run cost containment, and research areas for general study.

Coordination with other states will require structures and processes that support national standardization of data collection, sharing of technical knowledge, evaluating what works and what does not, and participating in forums for the sharing of ideas. National data standards include detailed specific definitions for each element to be included in encounter data, plan cost reports, quality assessment instruments, satisfaction surveys, etc. The development of these standards for data collection will increase the ability to:

- Pool data to create databases large enough to assess cost-effective treatment options for specific conditions.

- Make it possible for across state assessments of plan features to determine if specific plan features seem to affect utilization, quality, or cost.

- Recruit potential contracting entities. Uniform systems of data collection across states would increase the likelihood that HMOs and other participating insurers can enter new markets. These national standards will decrease the investment necessary to enter new markets thus increasing the potential competitiveness of the market place.

While the promise of managed care is great, so is its potential for implementation problems. New and expensive-to-implement administrative functions are necessary for a managed care program. In an era of increased concern about state spending, strong marketing will have to be done with the governor and the state legislators to justify an allocation of sufficient resources to permit the necessary infrastructure development. Without this development, a state runs serious risk of problems with access, quality of care, and plan viability.

A managed Medicaid program involves a public/private partnership with important roles and responsibilities for both the state and the managed care plans. Information is central to these roles and responsibilities. Without information, plans cannot manage the allocation of health care resources effectively. Without information, states cannot monitor the plan's allocation decisions, set appropriate payment rates, or involve new providers important to maintaining a competitive market place. A state that is an informed purchaser will attract good competitive partners, entities that are interested in long-term relationships with their clients and with the state.

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